

REMARKS

As a preliminary matter, applicants acknowledge with thanks the Examiner's withdrawal of the written description and enablement rejections from the prior Office Action.

THE AMENDMENT TO THE SPECIFICATION

The term "novel" has been deleted from the text of the specification at page 10, lines 23 to 28.

No new matter has been added to the application with the amendment to the specification set forth herein.

THE CLAIM AMENDMENTS

Upon entry of the amendments, claims 26 and 31 to 60 will be pending.

Claim 30 has been cancelled without prejudice or disclaimer.

Claims 34, 36-44, 59 and 60 have been withdrawn from further consideration by the Examiner as being drawn to a non-elected invention or species.

Claims 26, 47, 48, 49, 51, 52, 53 and 54, currently on file, have been amended to more clearly define the scope of protection being sought. Specifically, claims 26, 47, 48, 49, and 54 have been amended as explained in the response to the claim objections and the indefiniteness rejection. Claims 51-53 have been amended remove the term "orally" from the scope of the claims. The removal of the claim term "orally" is made without prejudice to pursue the deleted subject matter in a later-filed application.

As provided in the traversal to the obviousness rejection, claim 26 has been further amended to recite that the one or more cellular activities in skin cells modulated by the plant extracts are selected from the group consisting of: attenuating endothelial cell migration; increasing collagen production; inhibiting ultraviolet-induced extracellular protease activity and inhibiting dermal contraction. Support for this amendment to claim 26 is found at paragraphs 0027, 0193, and 0218 of the published application (US Publication No. 2007/0122492).

No new matter has been added to the application with the claim amendments set forth herein.

THE EXAMINER'S WITHDRAWAL OF CLAIMS 59 AND 60

The Examiner has alleged that newly submitted claims 59 and 60 are directed to an invention that is independent or distinct from the invention originally claimed. The Examiner alleged that the originally presented claims and newly submitted claims 59 and 60 do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature. Specifically, the Examiner alleged that Kondo *et al.* (JP 2000336024A) teach the technical feature of *Chenopodium quinoa* seeds, therefore, there is no special technical feature in the application and that, as such, the groups are not so linked as to form a single general concept under PCT Rule 13.1, and lack of unity of invention exists. The Examiner further stated that since Applicants have received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits and that claims 59 and 60 are therefore withdrawn from consideration as being directed to a non-elected invention (referencing 37 CFR 1.142(b) and MPEP § 821.03).

With respect to the Examiner's comment regarding the constructive election of the "originally presented invention" we note that the first Restriction Requirement issued by the Examiner was vacated and in the subsequently issued Restriction Requirement (dated June 21, 2007), the Examiner restricted the claims into two groups: Group I relating to a product, and Group II relating to a process of making the product. In response to this Restriction Requirement, Group I was elected for further prosecution on the merits. Presently pending claims 47 to 53, which are drawn to methods of using the dermatological formulation of claim 26, were added to the claim set at the time of responding to this Restriction on the basis that they meet the requirement under PCT Rule 13.1 and 13.2, and 37 CFR 1.475 for belonging to permissible combinations of different categories. Specifically, Section (e)(i) of Annex B of the PCT Administrative Instructions permits, for the purposes of determining unity of invention under Rule 13.2 "claims of different categories in the same international application: (i) in addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of the said product, and an independent claim for a use of said product." These claims were accepted by the Examiner and are presently under examination, as are claims 56 to 58, which are also directed to methods of using the dermatological formulation and were added with the Response to the Office Action dated November 13, 2007. As claims 59 and 60

likewise are directed to methods of using the dermatological formulation of claim 26, we believe that these claims should also be examined in the present application.

THE OBJECTION TO THE SPECIFICATION

The Examiner has objected to the use of the term "novel" at page 10 of the specification and has suggested the deletion of the term. Applicants have amended the term "novel" from page 10, line 23, of the specification as suggested by the Examiner.

In view of the foregoing, applicants respectfully request withdrawal of the objection to the specification.

OBJECTIONS TO THE CLAIMS

The Examiner has objected to claims 26, 30-33, 35, and 45-58 because of an informality with the grammar used in claim 26; specifically, the Examiner notes that the term "one or more plant extracts modulates" in claim 26, line 6, is not in the proper grammatical form. Applicants have amended claim 26, line 6, to read --one or more plant extracts modulate-- as suggested by the Examiner.

In view of the foregoing, applicants respectfully request withdrawal of the objections to the claims.

INDEFINITENESS REJECTION UNDER 35 U.S.C. § 112, 2ND PARA.

Claims 26, 30 and 47-49 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite. This rejection is rendered moot with the amendments that have been made to the claims.

Specifically, the Examiner notes that claim 26 (line 3) and claim 30 (line 2) recite improper Markush groups. Applicants have amended claim 26 to incorporate the proper Markush group language (i.e., --selected from the group consisting of--) as suggested by the Examiner. As noted above, claim 30 has been canceled with this paper.

In addition, the Examiner notes that there is insufficient antecedent basis for the following limitations in the claims:

"the activity" in claim 26, line 3;

"the appearance" in claim 47, lines 1 and 3; and claim 54, line 2;

“the onset of skin ageing” in claims 48 and 49, lines 1-2.

Claim 26 has been amended to delete the article “the” before the term --activity--.
Likewise, claim 48 and 49 have been amended to delete the article “the” before the term --onset of skin ageing--. Claims 47 and 54 has been amended to replace the phrase “the appearance of the skin” with the phrase --skin appearance--.

Because the claim amendments overcome the indefiniteness rejections, applicants respectfully request withdrawal of the indefiniteness rejections.

OBVIOUSNESS REJECTION UNDER 35 U.S.C. § 103(a)

Claims 26, 30-33, 35, and 45-58 stand rejected under 35 U.S.C. § 103(a) as obvious over Kondo *et al.* (JP 2000336024A) in view of Cyr (US 2004/0175439). This rejection is moot for canceled claim 30 and is respectfully traversed for the remaining claims.

The Examiner stated that Kondo *et al.* teach cosmetic (dermatological) compositions containing one or more humectant plant extracts of *Chenopodium quinoa* etc for dry skin. The Examiner acknowledged that Kondo *et al.* do not teach that the plant material from *Chenopodium quinoa* has matrix metalloprotease inhibiting activity, nor do Kondo *et al.* explicitly teach using *Chenopodium quinoa* seed.

The Examiner stated that Cyr teaches plant extracts and compositions comprising extracellular protease inhibitors. The Examiner further stated that, as evidenced by Cyr, *Chenopodium quinoa* has 66.3% MMP-1 inhibition (referencing page 16, Table 1), 92% MMP-2 inhibition (referencing page 20, Table 2) and 23.1-34.7% MMP-9 inhibition (referencing page 33, Table 4).

The Examiner alleged that it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use the extract of *Chenopodium quinoa* in a method for improving the appearance of skin, delaying the onset of aging, or delaying the dermatological condition such as inflammation since Kondo *et al.* teach the plant extract with sustained moisture-retention effects over extended periods, and possess properties effective for skin treatments that prevent, alleviate, or improve such conditions as dryness, rough skin, cracks, chaps, dandruff, pruritus and inflammatory diseases. The Examiner further alleged that it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use a dermatological formulation comprising plant extract from *Chenopodium quinoa*

that inhibits the activity of metalloprotease since Cyr teaches *Chenopodium quinoa* has 66.3% MMP-1 inhibition activity, 92% MMP-2 inhibition activity, and 23.1-34.7% MMP-9 inhibition activity and that it would also have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use *Chenopodium quinoa* seed since Kondo et al. teach the preparation of plants used in this invention is performed with the leaf, stem, root, flower, seed or whole plant and that choosing from a finite number of predictable solutions would have been obvious because a person of ordinary skill has good reason to pursue the known options with his or her technical grasp. If this leads to the anticipated success, it is likely that the product is not of innovation, but of ordinary skill and common sense.

The Examiner alleged that since the composition of Kondo et al. yielded beneficial results in cosmetic industry, one of ordinary skill in the art would have been motivated to use the composition from Kondo et al. and that from the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

The Applicants maintain that, as noted in Applicants' previous correspondence of May 9, 2008, and January 15, 2009, it is well-known in the art that the ability of a compound or composition to moisturise the skin is not necessarily an indication that the compound/composition inhibits MMP-9 or induces collagen production and that, as such, the fact that Kondo et al. describe a *Chenopodium quinoa* plant extract as having a moisturising effect on the skin in no way renders obvious its ability to inhibit MMP-9 activity and/or to induce collagen production and thus to affect processes which depend on these activities, such as the formation of wrinkles, loss of elasticity, inflammation, and the like.

As noted by the Examiner, Cyr teaches a *Chenopodium quinoa* extract that is capable of inhibiting MMP-1, MMP-2 and MMP-9. Cyr does not, however, teach a *Chenopodium quinoa* extract that is capable of modulating one or more cellular activities in skin cells selected from the group consisting of: attenuating endothelial cell migration; increasing collagen production; inhibiting ultraviolet-induced extracellular protease activity and inhibiting dermal contraction, as is demonstrated in the instant application, which activities are central to the efficacy of the recited dermatological formulation and its use in modulating processes which depend on these activities, such as the formation of wrinkles, loss of elasticity, inflammation, and the like.

Moreover, Applicants note that pending independent claims 47, 48, 49 and 56 are directed to methods that rely on the above-noted abilities of the recited plant extracts. In particular, these claims specifically require that the improvement in skin appearance, attenuating or delaying onset of skin ageing, treating or delaying onset of a dermatological condition, and delaying appearance or progression of visible effects of skin ageing, resulting from application of the recited dermatological formulation include decreasing the appearance of wrinkles or delaying onset of wrinkles. Claim 59, which as noted above Applicants submit should be examined with the other pending method claims, is directed to the use of the dermatological formulation in increasing collagen production in the skin. In this regard and in view of the fact, as noted above, that neither Kondo et al. nor Cyr teach or suggest that a *Chenopodium quinoa* plant extract is capable of modulating one or more cellular activities in skin cells, Applicants strongly assert that the worker skilled in the art would not have any expectation that a *Chenopodium quinoa* plant extract could be used successfully in the claimed methods, which utilize these activities of the plant extract. In contrast, the present application demonstrates that the *Chenopodium quinoa* and other recited plant extracts are able to affect one or more cellular activities, modulation of which is important in order for a dermatological formulation to be effective in achieving an anti-ageing effect on the skin.

For the reasons set forth above, Applicants assert that the combination of Kondo et al. in view of Cyr fails to render obvious the subject matter of pending claims 26, 30-33, 35 and 45-60. Solely in order to expedite prosecution of the instant application, however, Applicant has amended pending claim 26 to specify that the one or more cellular activities in skin cells modulated by the plant extracts are selected from the group consisting of: attenuating endothelial cell migration, increasing collagen production, inhibiting ultraviolet-induced extracellular protease activity, and inhibiting dermal contraction.

Because claims 26, 30-33, 35, and 45-58 are not obvious for at least the reasons set forth above, applicants respectfully request withdrawal of this rejection.

CONCLUSION

With this paper, each of the Examiner's rejections have been fully addressed and overcome. Because there will be no outstanding issues for this matter upon entry of this paper, applicants respectfully request withdrawal of all claim rejections and passage of this application to issue.

Respectfully submitted,

Dated: September 18, 2009

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